Smt. ChandabenMohanbhai Patel Institute of Computer Applications
BCA – III (A.Y. 2020-2021)

CA214 : Object Oriented Programming with C++

Assignment 4 – Polymorphism

Date :21st August,2020

1.	Write a C++ program to create a class PrintData, to support the implementation of below methods.
	a. print(int a);
	b. print(double a);
	c. print(string a);

2.	Write a C++ program to create a class Addition, to support the implementation of below methods.
	a. add(int a, int b);
	b. add(double a, double b);
	c. add (string a, string b);
	d. add(int a ,int b, int c);

3.	Write a C++ program to create a class Operations, to support the implementation of below methods.
	a. palindrome(int n);
	b. palindrome(string s);
	c. reverse(int n);
	d. reverse(string s);

4.	Write a C++ program to Overload the unary operator ++ to increment a class object attribute n by 5, when invoked.
5.	Write a C++ program to Overload the unary operators ++(increment by 1),--(decrement by 1) and – (convert the number to negative number).
6.	Write a C++ program to Overload the unary operator ! to find the factorial of a class object attribute n, when invoked.
7.	Write a C++ program to Overload the binary operator + and - to add and subtract the objects of a class when invoked.
8.	Write a C++ program to perform the Binary Operator Overloading to Subtract Complex Number.
9.	Create a class Distance with attributes feet and inches, overload the operator < to compare two distance and display the distance object which is less than the other object.
10.	Create a class Distance with attributes feet and inches, instantiate the object of class Distance using parameterized constructor. Assign the object to a basic type variable inch, in main().(Hint : Class to Basic type conversion)
11.	Create a class Time with attributes hour and minutes. Input minutes in main () and assign minutes to object of class Time. (Hint : Basic type to Class conversion)
12.	Create a class Mobile, with attribute size and method to display the attribute, create a class Laptop, with attribute size and method to display the attribute. Perform class to class conversion by assigning laptop object to mobile object. (Hint : Class to Class conversion)